

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the present application:

1. (Currently Amended) A fixing apparatus comprising:

a heat producing element that performs heat-fixing of an unfixed image on a recording medium;

a heating section that is provided with power and that heats the heat producing element;

a power supply that receives an instruction from a control circuit located externally of the fixing apparatus and provides the power to the heating section;

a first detecting section that detects a state of the heat producing element heated by the heating section;

a power suppressing section that, when the first detecting section detects a state in which a condition for not performing heat-fixing for the heat producing element has been satisfied, suppresses providing the power from the power supply to the heating section, regardless of a content of the instruction; and

~~a second detecting section that~~~~[[,]]~~~~when, the second detecting section receives, from the control circuit, the instruction for providing the power, detects a state of the providing that the feeding of the power is suppressed by the instruction and~~ to the heating section, does not perform or suppresses the heating.

wherein, when the first detecting section detects the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied, if there is a state in which the providing of the power from the power supply to the heating section is suppressed, despite the power supply receiving the instruction for providing the power from the control

circuit, the second detecting section detects the state and outputs a result of the detection to the control circuit located externally of the fixing apparatus.

2. (Previously Presented) The fixing apparatus according to claim 1, wherein the power supply comprises:

an inverter circuit that provides power with a high-frequency alternating current to the heating section; and

an oscillation stop circuit that stops oscillation of the inverter circuit when the condition is satisfied.

3. (Previously Presented) The fixing apparatus according to claim 2, further comprising:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a rotational speed of the heat producing member and detects, as a state of the heat producing member, from the phase signal, that the heat producing member has stopped rotating or has a rotational speed less than or equal to a threshold value.

4. (Previously Presented) The fixing apparatus according to claim 1, wherein the power supply comprises:

an inverter circuit that provides power with a high-frequency alternating current to the heating section; and

a processor, wherein:

the processor controls oscillation of the inverter circuit; and

the power suppression section suppresses providing the power regardless of the content of the instruction, by suppressing the oscillation of the inverter circuit regardless of the content of the instruction from the control circuit when the condition is satisfied.

5. (Previously Presented) The fixing apparatus according to claim 4, wherein:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a rotational speed of the heat producing member and

detects, as a rotational state of the heat producing member, from the phase signal, that the rotating heating element has stopped rotating or has a rotational speed less than or equal to a threshold value.

6. (Canceled).

7. (Previously Presented) The fixing apparatus according to claim 1, wherein:

the power supply comprises an inverter circuit that provides power with a high-frequency alternating current to the heat producing element; and

the power suppression section comprises a power suppression circuit that controls oscillation of the inverter circuit in accordance with a control signal supplied from the control circuit and suppresses oscillation of the inverter circuit regardless of the content of the

instruction, when the first detecting section detects the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied.

8. (Currently Amended) An image forming apparatus comprising:
an image forming section that forms an unfixed image on a recording medium; and
a fixing apparatus that performs heat fixing for an unfixed image formed on the recording medium in the image forming section[[:]],

wherein the fixing apparatus comprises:

a heating section that is provided with power and performs heating for a heat producing element that performs heat fixing of the unfixed image;

a power supply that receives an instruction from a control circuit and that provides the power to the heating section;

a first detecting section that detects a state of the heat producing element heated by the heating section;

a power suppressing section that, when the first detecting section detects a state in which a condition for not performing heat-fixing for the heat producing element has been satisfied, suppresses the providing of the power from the power supply to the heating section, regardless of a content of the instruction; and

~~a second detecting section that, when, the second detecting section receives, from the control circuit, the instruction for providing the power, detects that the feeding a state of the providing of the power is suppressed by the instruction and to the heating section, does not perform or suppresses the heating.~~

wherein, when the first detecting section detects the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied, if there is a state in which the providing of the power from the power supply to the heating section is suppressed despite the power supply receiving the instruction for providing the power from the control circuit, the second detecting section detects the state and outputs a result of the detection to the control circuit located externally of the fixing apparatus.

9. (Previously Presented) The image forming apparatus according to claim 8, wherein, in the case where the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied, is detected by the first detecting section of the image forming apparatus each time power is turned on and/or is restored from a sleep state, and/or at regular intervals during standby, the image forming apparatus issues an instruction for providing the power to the fixing apparatus, and makes the second detecting section detect that the heating section does not perform or suppresses the heating.

10. (Previously Presented) The fixing apparatus according to claim 8, wherein the power supply comprises:

an inverter circuit that provides power with a high-frequency alternating current to the heating section; and

an oscillation stop circuit that stops oscillation of the inverter circuit when the condition is satisfied.

11. (Previously Presented) The fixing apparatus according to claim 10, further comprising:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a rotational speed of the heat producing member and detects, as a state of the heat producing member, from the phase signal, that the heat producing member has stopped rotating or has rotational speed less than or equal to a threshold value.

12. (Previously Presented) The fixing apparatus according to claim 8, wherein the power supply comprises:

an inverter circuit that provides power with a high-frequency alternating current to the heating section; and a processor, wherein:

the processor controls oscillation of the inverter circuit; and

the power suppression section suppresses providing the power regardless of the content of the instruction, by suppressing the oscillation of the inverter circuit regardless of the content of the instruction from the control circuit when the condition is satisfied.

13. (Previously Presented) The fixing apparatus according to claim 12, wherein:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a rotational speed of the heat producing member and detects, as a rotational state of the heat producing

member, from the phase signal, that the rotating heating element has stopped rotating or has a rotational speed less than or equal to a threshold value.

14. (Previously Presented) The fixing apparatus according to claim 8, wherein:

the power supply comprises an inverter circuit that provides power with a high-frequency alternating current to the heat producing element; and

the power suppression section comprises a power suppression circuit that controls oscillation of the inverter circuit in accordance with a control signal supplied from a the control circuit, and suppresses oscillation of the inverter circuit regardless of the content of the instruction, when the first detecting section detects the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied.